

## Iconicity and Syncretism

### On Pronominal Inflection in Modern German

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#### 1 Introduction<sup>1</sup>

In paradigms of traditional grammars forms of selected nouns and verbs are listed and categorized in order to exemplify (as the term says) how forms of arbitrary words of the pertinent type are made up. Each position in a paradigm links a certain expression-form (sometimes called a 'phonological/orthographical word') to a 'bundle' of categories — a categorization — and thus determines an inflectional form (a 'grammatical word'). However, it is a characteristic feature of languages like Modern German that within its paradigms inflectional forms (distinguished according to traditional analyses) outnumber expression-forms (i.e., phonologically distinct forms — forms of different shapes) by far. Thus arises the question of which factors control the distribution of expression-forms over the positions in paradigms: Is it arbitrary (looked at from a synchronic point of view) that certain expression-forms are coupled with certain categorizations and not with others, and also that certain inflectional forms are identical in expression while others are not? It is under these aspects that the pronominal inflection

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of Modern Standard German (henceforth, 'German' for short) will be discussed in the present paper.

Given this subject matter, the notion of paradigm cannot but figure prominently, and certainly the theoretical importance of paradigms has been elaborated nowhere as vigorously as in Lieb (1975; 1980; 1992). As Lieb points out, paradigms 'bring into play in a complex manner morphology, morphosemantics, syntax and sentential semantics simultaneously' (cf. 1992:4), which accounts for the special status they enjoy in language systems. Moreover, Lieb makes it very clear that in dealing with paradigms one has to take care of (i) the structure of expression-forms; (ii) the system of the so-called grammatical categories; and (iii) the relation between both. I shall adopt this point of view as a guiding principle for the present essay. (Discussion will be completely informal, however, and will not presuppose Lieb's formal explication of the notion of paradigm).

The next two sections serve to provide a provisional clarification of the problems that will be addressed and to indicate directions where answers may be found. First I turn to syncretisms, which constitute, according to Hjelmslev (1935:60) "*le problème capital dans le domaine des cas, comme dans la morphologie d'une façon générale.*"

## 2 Syncretism

As a step towards uncovering systematic identities of form, often the arrangement of paradigmatic tables is modified (as compared to traditional presentations) so that inflectional forms of identical shape are put together, where possible (cf. Jørgensen 1953, ch. 5, Pike 1965, and, as a recent grammar, Eisenberg 1989:162, 199-200); see Table 1 for the German demonstrative pronoun *DIESER*. In this way "syncretism fields" (Bierwisch 1967:245) or "compact areas of similarity between the forms (more precisely: the expression sides of the forms)" (Seiler 1967:54) may be made to come about as indicated by the boxes.<sup>2</sup> The underlying idea would appear to be that identity of expression is (with more likelihood) systematic when forms are categorized similarly. Actually, a widely discussed view has it that systematic identity of expression is due to neutralization; it is assumed that in the pertinent cases a certain distinction (found elsewhere in the language) simply does not apply.

<sup>2</sup> The following abbreviated names of categories are used. Cases: N. (nominative), A. (accusative), G. (genitive), D. (dative); genders: Msc. (masculine), Fem. (feminine), Ntr. (neuter); numbers: Sg. (singular), Pl. (plural).

There is no consensus on how syncretism fields are to be determined; here I accept as decisive whether ambiguities may be resolved within noun groups (by inflectional exponents) or not, which leads to ten fields in Table 1. For example, the ambiguity of *diesen* is resolved in *diesen Mann* 'this man', A. Sg. Msc., and in *diesen Männern* 'these men', D. Pl., by the non-occurrence or occurrence of number/case-exponents on the form of the substantive. On the other hand, co-occurring forms of substantives or adjectives will never suffice to discriminate readings covered by the same syncretism field (as happens with N. and A. in the Ntr., e.g., *dieses kleine Kind* 'this

|    | Sg.    |        |        | Pl.    |
|----|--------|--------|--------|--------|
|    | Msc.   | Ntr.   | Fem.   |        |
| N. | dieser | dieses | diese  | diese  |
| A. | diesen | dieses | diese  | diese  |
| G. | dieses | dieses | dieser | dieser |
| D. | diesem | diesem | dieser | diesen |

**Table 1**

Paradigm DIESER: syncretism fields

little child'; see Wurzel 1984, ch. 3, on the interplay of exponents in German noun groups). In that case non-differentiation in expression is not a peculiarity of the paradigm under discussion but is 'system-wide' and, as far as that goes, systematic (cf. Williams, 1994:25, on English and Latin). In the following, by *syncretism* I will refer to this type of identity of expression (that is non-resolvable within noun phrases by means of inflection). It will be discussed how syncretism in the paradigm referred to (i.e., with pronouns of the type DIESER) may be adequately taken care of as neutralization.

### 3 Iconicity

Syncretism (in the sense indicated) is not the only type of systematic or regular identity of expression between inflectional forms. At least as far as the paradigm DIESER is concerned, I submit that identity of expression is not arbitrary even between inflectional forms that belong to different syncretism fields. To show this, I will inquire into the regularity that controls the distribution of the five expression-forms *diese*, *dieser*, *diesen*, *dieses*, *diesem* among the ten syncretism fields.

The distribution of inflectional exponents within paradigms is as a rule not arbitrary, as emerges from Jakobson's classical papers on inflectional morphology. Jakobson emphasized strongly that iconicity constitutes a pervasive aspect of linguistic patterns, and especially that "in syntax and morphology (both inflection and derivation) the intrinsic, diagrammatic correspondence between the signans and the signatum is patent and obligatory" (Jakobson 1965:355). This is true for paradigms, in particular. Paradigms are, as Seiler (1967:65) put it, "composed of two kinds of categories: content and expression". Similarly, Lieb (1992) distinguishes functional categories ("Funktionskategorien"), such as grammatical categories in a traditional sense, and expression-related categories ("Formkategorien"), i.e., categories determined by recourse to the make-up of expression-forms. Iconicity as a principle of paradigmatic organization shows when the system of functional categories and the system of expression-related categories exhibit analogous structures. Obvious cases in point are found where inflectional exponents throw into relief forms of marked functional categories as against forms of unmarked functional categories that are left without expressional marks (Greenberg 1966, 1966a). The occurrence of number suffixes with Pl.-forms of German substantives as opposed to the lack of such suffixes with Sg.-forms is but one familiar example (in conformance with Greenberg's *Universal 35*).

In fact, complete lack of exponents with forms of unmarked functional categories may be taken as a limiting case, in Matthews' terms, of "less weighty" formation (Matthews 1991:234). Iconic relations between expression and function may also be recognized, where each of the expression-forms to be compared bears a suffix. For example, weak forms of adjectives in German show the bare Schwa-suffix *-e* only in the N. (and in the A. where it is identical to the N.) and moreover only in the Sg., thus in the unmarked case and unmarked number, whereas in more marked 'areas' — in the Pl. as well as in the A., G. and D. of the Sg. — we find forms with the consonantal suffix *-en*. Thus phonological weight and markedness of functional categories show a positive correlation. I would argue that German inflection is dominated to a high degree by such iconic relationships (Wiese 1994:162); here I shall try and substantiate this hypothesis by an analysis of the paradigm *DIESER*. First I shall take up the structure of expression-forms and thus the system of expression-related categories.

#### 4 Expression-forms

The inflectional suffixes of German may be ordered according to their phonological weight (or 'strength'), in particular, according to the pronounced-



ness of consonantism; the suffix *-e* is non-consonantal, suffixes such as *-(e)n* and *-(e)s* are singly consonantal, suffixes such as *-(e)st* are doubly consonantal. Distinctively heavy suffixes have particularly restricted distributions and particularly specific 'signalling capacities'. Thus the doubly consonantal suffix *-(e)st* is the only one that indicates unambiguously person as well as number with verb forms (2nd Ps. Sg.). In contradistinction verb suffixes such as *-e*, *-(e)n*, *-(e)t* are each dispersed over more than one person-number-categorization within traditional verbal paradigms.

Among singly consonantal suffixes, too, an order may be established that is based on the phonological properties of the occurring consonants (for verb suffixes see Wiese 1994). Among suffixes of the pronominal inflection in particular, *-en* and *-em* stand out as a special subgroup. Diachronically (and dialectically) their phonological similarity is often reflected in the loss of the distinction, when the suffix with the dental nasal is 'substituted' for the one with the labial nasal. Insofar as such developments are part of more general tendencies whereby the weight of unaccented syllables is reduced, *-em* qualifies as a heavy (more weighty) nasal suffix relative to the light or simple nasal suffix *-en*; from a synchronic point of view, relative markedness of nasal phonemes may be taken as decisive.

The consonants of non-nasal suffixes differ sharply with respect to consonantal strength (Vennemann 1982). *-er* shows the most sonorous consonant, which is, moreover, subject to vocalization in forms like *dieser* (but is kept in 'doubly suffixed' forms, e.g., the G. Pl. of the relative pronoun, viz. *deren*); thus it is contradistinguished from *-es* with its salient 'hissing' fricative. It appears defensible, then, to classify the suffixes under discussion by reference to their phonological properties. The pertinent phonological terms may be used to refer to these morphological categories. *-e* is a *non-consonantal* suffix, while *-er*, *-en*, *-es*, and *-em* are *consonantal* suffixes; among these *-en* and *-em* are *nasal* suffixes and *-es* and *-em* are *heavy* suffixes.

As with verb suffixes there are characteristic differences in distribution. Heavy suffixes (*-es*, *-em*) are subject to a particularly restricted use within the German inflectional system as a whole, whereas light suffixes, such as *-e*, *-en* (as well as the absence of suffix), are rather ubiquitous. Inspecting the pronominal paradigmatic table in particular, we may note regarding nasal suffixes (*-en*, *-em*) that each of them is restricted to just two positions in the paradigm while the remaining suffixes each occupy four of these.

Before we can explain such distributional restrictions, we have to turn to a discussion of functional categories. But even before doing this I shall consider an aspect of paradigm design that has attracted less attention or has even been disapproved of in modern 'word-and-paradigm' approaches, viz. the hierarchical structure of paradigms.

## 5 Hierarchical structure of paradigms

Often traditional paradigmatic tables group together forms of certain categories while forms of certain other categories are scattered over the whole paradigm. Typically, forms of the active voice constitute a major section within verb paradigms which in its turn comprises subsections of present and preterit forms. On the other hand, forms of the second person are to be found in all those subsections that contain finite forms. Thus paradigmatic tables are not unordered lists of (categorized) forms; rather, inflectional forms are arranged in a hierarchical system (for discussion and references see Plank 1991 and Matthews 1991).

In his landmark article of 1959 (*In defence of WP*), Robins maintained that hierarchical arrangement of paradigmatic tables is due to the two-dimensional (or at best three-dimensional) way of presentation, which, he held, “does not affect the logic of paradigmatic organization” (1959:125). But this opinion (though shared by many) hardly does justice to the traditional notion of paradigm. Far from being attributable to mere “representational necessity” (l.c.), hierarchies are developed quite deliberately. This is true of school grammars of the classical languages as well as of Germanic studies; Braune’s leading grammars of the 1880s furnish graphic illustrations (Braune 1880; 1886). In paradigmatic tables, headings are ranked using a multiplicity of numbering devices and graphical attributes (e.g., Roman vs. Arabic numerals, spacing, different type faces); the same ranking is often obvious from the succession of classifications within texts and moreover from the sequence of categories in categorizations. “*lobe* is 1st Ps. Sg. Ind. Pres. Act.” must be read as shorthand for “*lobe* is the 1st person of the singular of the indicative of the present of the active” (of the weak verb *LOBEN*). The respective ‘genus proximum’ always appears in an *of*-phrase (or — in Latin and German — in the genitive). Hence the pertinent category of the most highly ranked classification (here: voice) appears in the last position of the sequence; the pertinent category of the second classification (here: tense) appears in the penultimate position of the sequence and so forth. Where traditional grammars use cross-classifying tables (e.g., for paradigms of substantives), columns usually correspond to categories of a more highly ranked classification (e.g., numbers) whereas rows correspond to those of a subordinate classification (e.g., cases). Such tables may be grouped into more comprehensive ones, the columns of which represent categories of an even more highly ranked classification (e.g., declensions). It appears that hierarchical order as displayed by paradigmatic tables is evinced in traditional grammars as a fundamental of inflectional systems.

This is not the place for a general discussion of the factual basis that underlies the hierarchical organization of traditional paradigms. Suffice it to

point to the well-known results of functional-typological research into grammatical hierarchies (for a summary view see Croft 1990). As Carstairs-McCarthy notes, the traditional sequence of verb categories in particular corresponds to a subsection of a more comprehensive hierarchy of 'relevance' propounded by Bybee (1985), moreover, "One could, in fact, see relevance as imposing a hierarchy on the various properties within a morphosyntactic representation [ $\approx$  a categorization — BW]." (Carstairs-McCarthy 1992:198). According to Bybee there is a universally preferred ordering of inflectional exponents that is rooted in the semantics of the respective categories: the more directly the semantic contents of verbal inflections affect or modify the semantic content of a verb stem — i.e., the more 'relevant' they are to the verb — the closer to the stem their exponents are placed; expressional proximity mirrors closeness of conceptual relationship (cf. also Haiman 1985:106, 238 et passim).

For categories of nouns, too, tradition offers a (factually based) normal sequence as in '*Kindern* is D. Pl. Msc.' (again in ascending order of rank), and here, too, the structure of expression-forms complies with a hierarchy of relevance in Bybee's sense. As a rule (Greenberg 1966:95, *Universal* 39) case suffixes (here: *-n*) being exponents of syntactical-relational categories are positioned less closely to stems as compared to exponents of number (here: *-er*), the latter classification being "more relevant to the meaning of the noun" (Bybee 1985:34). Moreover gender categories naturally relate to substantival stems as grammatical gender engenders a classification of reference objects.

## 6 Hierarchy and syncretism

Hjelmslev (1935:107-108) advanced the assumption that a relation between categories which he termed dominance ("domination", in French) is a crucial determining factor for the appearance of syncretism (in a wider sense of the term, covering any identity of expression between inflectional forms or suffixes), and it was precisely the relation between number and case that he used for illustration. With Latin substantives, different cases of the Sg. or different cases of the Pl. may coincide regularly, whereas Sg.- and Pl.-forms of the same case are (nearly) always distinguished. According to Hjelmslev, this indicates that (in Latin) number is *dominant* relative to case: It is due to the 'pressure' of the dominant category ("la pression de la catégorie dominante", 108) that the dominated category incurs syncretisms.

The very term dominance suggests that syncretisms are intimately related to the hierarchical organization of paradigms. Let us assume that the (dominating) classification for number ranks more highly in the sense that it

provides the classes (of singular and plural forms) which are then subject to *subclassification* for case. Then, if some of the possible case distinctions are not drawn when Sg.- or Pl.-forms are subclassified for case, singular-internal or plural-internal case syncretisms will arise (cf. Williams 1981; 1994).

However, as pointed out by Hjelmslev (1935:108), in Latin a relationship of reciprocal dominance (“domination réciproque”) has to be acknowledged, too. Consider the 1st and 2nd declension: there are case syncretisms within genders, e.g., G./D.-syncretism in the Fem. and N./A.-syncretism in the Ntr.; on the other hand, there is gender syncretism (of Msc. and Ntr.) within various cases. An analogous observation can be made with respect to German pronominal inflection. But then it is not obvious how a concept of reciprocal dominance may be reconciled with the interpretation of dominance in terms of hierarchical classification. This point will have to be cleared up in the course of the following discussion of functional categories, but only in Section 11.

## 7 Categories of case

Consider the four subparadigms Msc., Ntr., Fem. and Pl. corresponding to the columns in Table 1. Three patterns of case syncretism appear. Four cases are distinguished only in the Msc. In the Ntr., N. and A. are not distinguished. In the Fem., the G.-D.-distinction is missing in addition. In the Pl. (with three expression-forms) the middling solution is operative again. It is true, in the Ntr. the suffixes of G.-forms and N./A.-forms have collapsed in German. But this ‘deficiency’ is compensated for by alternative inflectional means such as suffixes on substantives or additional differentiations of expression (as happens with the most important one among pronominally inflected words, viz. the definite article: *das*, N./A. Ntr., is distinguished from *des*, G. Ntr.). So this distinction is one that is realized in expression in German; hence there is no syncretism. The main distinction regarding case which is made throughout is the one between N./A. on the one hand and G./D. on the other, or to use Greenberg’s terms (1966a:80), the one between ‘direct’ cases (N./A.) and ‘oblique’ cases (G./D.). While terminology varies this distinction is widely accepted as a fundamental of case systems (e.g., Blake 1994:34, *core cases vs. peripheral cases*). As regards German the “similarity between Nominative and Accusative” was also discussed by Seiler (1967:71), who found “that the expressions for Nominative and Accusative, and the expressions for Genitive and Dative show more respective similarities than do those corresponding to any two other compared categories” (70), and thence concluded that “a close similarity of expression [...] seems to be paralleled by an equally close semanto-syntactic similarity” (71).

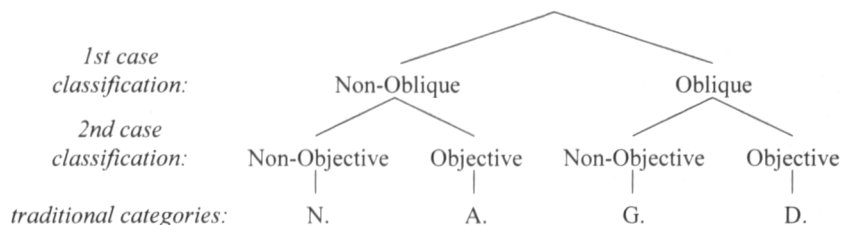
As Greenberg (1966a:80) has established, "we often find that one or more direct cases have zero expression as compared to the oblique suggesting that the direct cases comprise an unmarked category in relation to the oblique." German pronominal inflection may be regarded as an instance of this general pattern, which requires (more) pronounced marking for oblique cases (cf. Haiman 1985:137), provided that the above-discussed order of suffixes (by phonological weight) is assumed. In the Fem. and the Pl., oblique cases are distinguished by consonantal suffixes as against the uncharacteristic non-consonantal *-e* of non-oblique cases. In the Msc., heavy suffixes (*-es*, *-em*) in oblique cases stand out against light suffixes in direct cases (*-er*, *-en*). *Suffixes of oblique cases are never lighter than those of direct cases, but are as a rule (i.e., except in the Ntr.) heavier.*

Functional reasons underlying the oblique cases' need for marking are rather obvious but cannot be discussed here in any detail (see Plank 1979, with references): Direct cases fulfil elementary syntactic functions (such as Subject or Direct Object). Nominals that bear such functions play, as it were, their expected or most usual rôle, and thus a specific indication is not called for — in contradistinction to nominals that have 'special functions' such as Attribute or Indirect Object (which fall within the scope of oblique cases).

By a second ordering of cases, which is also assumed quite frequently, A. and D. are set apart as a group of their own. Whereas designations and motivations vary again, the decisive point would appear to be that Object is the primary function of the A. and also of the German D. It is true, verbs, adjectives and prepositions may govern the G. in German. But, no doubt, Attribute is its primary function; where the G. is found with prepositions, its attributive origin is usually still obvious (and hence grammars classify the respective prepositions as 'secondary'). With verbs and adjectives, the G. is clearly exceptional. It would appear to be justified, then, to designate A. and D. as *objective cases*.

This double grouping of cases was advocated as early as in 1808 by Friedrich Ast (Ast 1808:67-69, *unmittelbare/mittelbare casus, active/passive casus*; cf. Hjelmslev 1935:25-26, for discussion), and it constituted the basis of Bierwisch's pioneering treatment of German pronominal inflection (Bierwisch 1967). In theories that use morphosyntactic features, it may serve to found the view that cases are derived (while features are basic): The four cases of German may be analysed in terms of two features called *Oblique* and *Objective*, respectively (Zwicky 1978:133). Adopting the approach hinted at in the previous section, I assume a system of two case classifications (classifications of syntactic units for case), which are ranked. The *first case classification* supplies the set of less marked, non-oblique case forms (of N. and A.) on the one hand and the set of more marked, oblique case forms (of G. and D.) on the other. Both sets are then subclassified in terms of

the Non-Objective–Objective-distinction (the *second case classification*, which supplies the N.–A.-distinction and the G.–D.-distinction); put as a diagram:



Following Lieb (1975), I construe morphosyntactic categories (such as cases) as sets of syntactic units; roughly, N. is the set of all ‘nominative forms’, etc. *Oblique* and *Objective* may be understood as names of such sets, too. D. is, then, the intersection of Oblique and Objective (D. = Oblique  $\cap$  Objective), G. is the difference of Oblique and Objective (G. = Oblique  $\setminus$  Objective, i.e., Oblique without Objective); and similarly, A. = Objective  $\setminus$  Oblique. N. comprises the remaining case forms. (Clearly, if cases were taken as basic, one could still introduce Oblique and Objective as derived categories.) In what follows, reference to *features* may thus be understood as reference to *categories* (sets of units).

The ranking of the two case classifications may be justified by recourse to general accounts of case hierarchies. According to Greenberg (1966a:80), the typical basic inventory of case systems generally includes a subject case, an objective case, and a possessive case. As for Indo-European languages in particular, Kurylowicz (1964:188) has distinguished N., A. and G. as the grammatical cases proper, which form the core of more elaborate case systems. According to Blake, the four cases of German (N. - A. - G. - D., in this order) occupy the four highest ranks of a general case hierarchy that accounts for the particular order in which case systems “do tend to be built up” (Blake 1994:157). As the above diagram shows it is this order that is also obtained from the two said case classifications if the Non-Oblique–Oblique-distinction is treated as the superordinate one.

## 8 Case syncretism and case exponents

Assuming the features Oblique and Objective, one may analyse case syncretisms in the paradigm DIESER as neutralizations (as envisaged in Sec. 2, supra). This is presented in Table 2 for the four subparadigms that have been referred to. In conformance with traditional practice, columns correspond to

the superordinate classification (*Non-Oblique-Oblique*) and rows to the subordinate one (*Non-Objective-Objective*). For convenience I have put familiar case names behind each form. The arrangement of the partial tables is motivated by the following treatment of gender features. Dashes indicate 'missing' forms. Names of unmarked categories (*Non-Objective*, *Non-Oblique*) are left out.

Within the minimally developed subparadigm — the Fem. — only the distinction *Non-Oblique-Oblique* applies; distinct Objective-forms are 'missing', which means that there is no N.-A.-distinction (among non-oblique forms) and no G.-D.-distinction (among oblique forms) within the Fem. The distinction *Non-Oblique-Oblique* dominates (in Hjelmslev's sense) the distinction *Non-Objective-Objective*. The dominated (subordinate) classification is subject to syncretism whereas the dominant (superordi-

|           |             |              |              |           |
|-----------|-------------|--------------|--------------|-----------|
|           |             | Oblique      |              | Oblique   |
|           | <i>Pl.</i>  |              | <i>Msc.</i>  |           |
|           | diese N./A. | dieser G.    | dieser N.    | dieses G. |
| Objective | ———         | diesen D.    | diesen A.    | diesem D. |
|           | <i>Fem.</i> |              | <i>Ntr.</i>  |           |
|           | diese N./A. | dieser G./D. | dieses N./A. | dieses G. |
| Objective | ———         | ———          | ———          | diesem D. |

**Table 2**

Paradigm DIESER: case syncretisms

nate) classification is as a rule reflected in distinct expression-forms. Referring to the features of the superordinate classification and the subordinate classification as the dominant and the recessive feature, respectively, we may note with regard to the paradigm DIESER: Case syncretisms are due to the absence of forms that are marked for the recessive case feature. Their office is taken over, as it were, by their unspecific counterparts. It follows from the ranking of classifications that the corresponding 'N.-form' — more correctly, the unspecific non-oblique form — substitutes for a missing A.-form (and not, for example, a G.- or D.-form); likewise an unspecific oblique form substitutes for a missing D.-form.

As can be read off Table 2, the distribution of suffixes reflects this situation. *Within the paradigm DIESER, nasal suffixes occur with all of the Objective-forms and with these only.* Inversely, forms without nasal suffix

may appear in objective cases (A., D.) if, and only if, there is syncretism (i.e., where no Objective-forms are distinguished as it happens in the Fem. and the direct cases of the Ntr. and the Pl.). Put differently, insofar as Objective-forms are distinguished at all, these are identified by nasal suffixes. The distinction *Non-Objective-Objective* is thus iconically mirrored in the structure of expression-forms.

Jakobson (1965:353) drew attention to "such situations where different affixes share a certain grammatical function and one constant phonemic feature". Moreover, it was just nasality as an 'indicator' of case that Jakobson referred to for illustration, namely nasality in various instrumental endings in Polish and the occurrence of the labial nasal "in the endings of marginal cases (instrumental, dative, locative)" in Russian. The rôle of nasal suffixes in the German paradigm *DIESER* may be added as further evidence for Jakobson's thesis that "separate phonemes or distinctive features within grammatical morphemes may serve as autonomous indicators of certain grammatical categories" (l.c.). Due to case syncretism, the relationship is not self-evident in German; still, it is readily uncovered when case syncretism is interpreted as neutralization.

## 9 Gender syncretism and gender exponents

As concerns substantives, classification for gender is a classification of stems or word-paradigms. In the light of the structure of substantival paradigms, German grammars often draw a major distinction between Msc./Ntr. on the one hand and Fem. on the other, see, e.g., Paul (1917:5). The Ntr. presents itself as a limited subtype of the broader category Msc./Ntr. While similarity of paradigm structure gives rise to grouping together Msc. and Ntr., Fem. and Ntr. may be opposed to Msc. as marked genders. The Msc. stands out against the Fem. and the Ntr. by its more variegated inflection, which (among other things) evidences its unmarked status. For example, all types of native plural formation are instanced with substantives of the Msc.; but, disregarding the peripheral *-s*-Plural (which is found with all genders), normal plural formations do not combine regularly with both Ntr. and Fem. In the Fem., *-en*-Plural prevails over Pl. in *-e* with umlaut, while other types are quite exceptional (Pl. in *-e* without umlaut) or do not occur at all (Pl. in *-er*). On the other hand, it is just the latter types of formation that are typical of neuter substantives, while with these the former are restricted to a handful of exceptions. The two groupings of substantives' genders would suggest two gender classifications such that the first classification supplies the distinction between Fem. and Non-Fem., whereas the second one subclassifies



the Non-Fem.-domain into Ntr. and Non-Ntr. (so that Msc. is the non-neuter and non-feminine, thus unmarked gender).

Within pronominal inflection, gender is a classification of word forms (syntactic units). Still, one might consider an analogous classification as with substantives. With word forms of the plural, however, genders are never distinguished by different expression-forms in German. As admitted by Robins (1959:126), "it would hardly be reasonable to posit three genders in the plural paradigms of German adjectives and articles [...] merely to provide symmetry with the singular paradigms". While grammars are not always explicit about the matter, often "[c]ommon form[s] for all genders" (Curme 1922:129) are assumed; in effect, gender (with word forms) is treated as a subclassification of Sg. (explicitly so by Blevins 1995:141). This would allow for a straightforward handling of the partial syncretism of Msc. and Ntr. in the paradigm DIESER: Msc.-forms and Ntr.-forms would be Non-Fem.-forms of the Sg., the distinction between Ntr. and Non-Ntr. (Msc.) being restricted to the relatively unmarked, non-oblique cases. However, some problems remain.

There is another conspicuous partial coincidence in expression, viz. between the Fem. and the Pl., which is left out of consideration by the account just sketched: Fem.-forms (*diese, dieser*) constitute a subset of plural forms. As regards expression-forms, the distinction between Msc./Ntr. on the one side and Fem./Pl. on the other is the second major division in German pronominal paradigms (besides the one between direct and oblique cases), as has been emphasized repeatedly, e.g., by Frey (1975:189). Does it make sense, then, to try and establish a 'supercategory' covering Fem.- and Pl.-forms (comparable to Msc./Ntr.), as has been suggested, though rather tentatively, by Eisenberg (1989:199)? Do Fem. and Pl. have something functional in common? (asked Seiler 1966:195). Since it is known that the expressional propinquity of Fem. and Pl. is not merely an idiosyncrasy of German (cf. Ibrahim 1973), it has even been claimed (by Leiss 1994) that these categories' 'meanings' may be brought down to a common denominator.

If (i) the Msc. is the unmarked gender (in the Sg.) and (ii) there is no gender distinction in the Pl., then Msc.-forms and Pl.-forms are, in a sense, likewise unmarked for gender, viz., both are not members of the marked genders Fem. and Ntr. Hence Msc.-forms and Pl.-forms would appear to differ just with respect to number. Plural being the marked number, one might expect these two groups of forms to be distinguished by number exponents on the Pl.-forms. But, as a matter of fact, Pl.-forms show *lighter* suffixes than Msc.-forms; even the non-consonantal suffix *-e* appears in the N./A. Pl. What is more, all of the three expression-forms that are used in the Pl. (in *-e, -er, -en*) occur also in the Sg., but conversely, heavy suffixes (*-es, -em*) are to be found *only* in the Sg., moreover only in the Msc. and Ntr. It

would seem, this distribution does not come up to expectation easily. Anyhow, we have to acknowledge, that pronouns such as *DIESER* do not employ extra plural exponents — in contradistinction with German substantives the plural forms of which are usually distinguished quite clearly from singular forms by suffixes and/or umlaut.

As Brøndal's *principe de compensation* says (Brøndal 1940:102 et passim), within marked 'areas' of paradigms, distinctions are often lacking that are drawn in less marked 'areas' (lack of gender distinctions in the plural being a case in point, cf. Greenberg 1966, *Universal* 37). This is true in particular of distinctions that serve in 'agreement'. Subject-verb concord in English supplies an extreme case since exponents of person/number are for the most time restricted to forms of the 3rd Ps. Sg. (in the Ind. Pres.) as in *loves*; otherwise, in the Ind. Pres. of regular verbs the bare stem appears (*love*). Thus overt indication of concord is restricted to what is by standard assumptions the unmarked number, viz. Sg., and the unmarked person, viz. 3rd Ps., and moreover to the unmarked mood and the unmarked tense. More specifically, we may note that there is no distinction for person in the Pl., provided that a distinction between Sg.- and Pl.-forms is made at all. As it happens, we encounter a similar situation as is found with gender concord in German: Forms of presumably marked categories (1st and 2nd Ps. with English verbs; Fem. with German pronominals) coincide with forms of the Pl., that is, a category that does not countenance the pertinent classification (person in English; gender in German) at all. In addition, in both English and German the expression-forms in question are less weighty than might be expected: in English they lack suffixes, in German they have non-consonantal or light consonantal suffixes.

Nevertheless, within English Grammar no 'markedness paradox' arises. A verb form without suffix such as *love* may be classified as a form that is indifferent regarding person, moreover that is an absolutely unmarked form; on the other hand, the suffix on a form such as *loves* may be identified as an exponent of 3rd Ps. (in the Sg. Ind. Pres.). Again, there is an iconic relationship between form and function: the expression-form marked by suffix (the 's-form') has a specific function, whereas the 'base'-form (without suffix) occurs wherever there is no positive reason to apply a more specific form (Strang 1962:127). *s*-forms 'signal' membership in a certain category of person even though this category happens to be the unmarked one (3rd Ps.); thus they oppose to forms that are simply indifferent with respect to person. In German, there is a similar, though somewhat more complex situation, which may be treated along the same lines. The point to note is that iconicity of form-function-relations is not infringed when forms of presumed unmarked categories show weightier exponents than do forms that are indifferent to the pertinent classification.

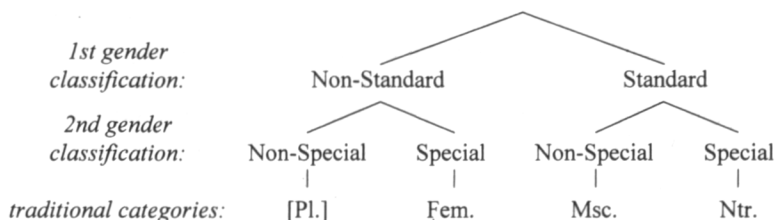
## 10 Categories of gender

Any pronominal form with a heavy suffix (*-es*, *-em*) is a *Msc./Ntr.*-form. On the model of *s*-forms of English verbs, I assume that it is (part of) the 'job' of these suffixes to indicate membership in a relatively unmarked category, viz. the relatively unmarked gender category *Msc./Ntr.* What is common to the *Fem.* and the *Pl.* is that no such gender exponents are employed in these subparadigms. This state of affairs seems to be based on the architecture of German inflection. *Fem.* is a marked gender category and *Pl.* is a marked number category. Thus *Fem.* and *Pl.* are comparable on account of their respective positions in the system of categories. Coincidences in expression between *Fem.* and *Pl.* do not necessitate a search for a 'common meaning' — not any more than the wide functional coverage of English verbs' base forms is indicative of a common semantic denominator of the categories that are involved, e.g., 1st *Ps.*, 2nd *Ps.*, and *Pl.* Assuming that heavy suffixes 'signal' membership in *Msc./Ntr.*, we recognize that *Msc./Ntr.* forms oppose to gender-indifferent forms (very much like English 3rd *Ps.* forms oppose to person-indifferent base forms).

As regards substantives, *Msc.* has been considered the unmarked gender. However, this characterization has to be qualified as far as word forms are concerned. While the *Msc.* certainly is a relatively unmarked gender category (as compared to *Ntr.* and *Fem.*) it is relatively marked as opposed to the set of forms that are indifferent to gender, viz., plural forms. This set may be acknowledged as a fourth gender class in addition to the three known genders. Indeed, as Seiler (1967:65) suggests in his discussion of the German definite article, "we might dispense with the dimensions of the singular and plural and, since the latter is neutral with regard to genders, we might put it on a par with the three genders as the 'neutralized' gender." Still, one may continue to use "*Pl.*" as a name for the said class (as does Seiler). But it should be made very clear that, if we adopt Seiler's view, it is 'genderless' forms (in a sense to be made precise) that we are concerned with. What we need, then, is a classification system for pronominal forms that provides the four categories in question.

As noted above, evidence points to the fact that it is the distinction *Msc./Ntr.* vs. *Fem./Pl.* which is fundamental to the German gender system. Thus it appears that gender categories could be supplied by a system of ranked classifications just like case categories are. The possibility presents itself of analysing gender in German in terms of two features, whereby a close structural analogy between gender and case in pronominal inflection may be established. Furthermore, forms with heavy suffixes call for a positive characterization of the *Msc./Ntr.*-class, these suffixes being the only ones that are safe gender exponents. I propose to assume, therefore, a dis-

inction of *Msc./Ntr.* vs. *Non-Msc./Ntr.* as the *first gender classification* within German pronominal inflection. A simple name for the category that comprises both *Msc.*- and *Ntr.*-forms would seem to be welcome. For lack of a received term, I shall refer to it as *Standard* (i.e.,  $\text{Standard} = \text{Msc.} \cup \text{Ntr.}$ ). On the other hand, as discussed above, *Fem.* and *Ntr.* stand out as marked genders. The union of these may also be taken to constitute a gender category, for which again a term is wanting. Here it will be named *Special* (i.e.,  $\text{Special} = \text{Fem.} \cup \text{Ntr.}$ ). Assuming these categories, we arrive at a system of gender classifications that may be presented by a diagram analogous to the one given above for the system of case classifications:



The categories *Standard* and *Special* may be referred to as gender features. They parallel the two case features *Oblique* and *Objective*. Again, the combinations of two features provide for four traditional categories, viz. the three familiar genders ( $\text{Msc.} = \text{Standard} \setminus \text{Special}$ ,  $\text{Ntr.} = \text{Standard} \cap \text{Special}$ ,  $\text{Fem.} = \text{Special} \setminus \text{Standard}$ ) and in addition the category of inflectional forms occurring in the *Pl.*, now being identified as the category of forms without gender features. (Being the name of a number category, “*Pl.*” is put into brackets in the above diagram.)

Now that gender features are available, syncretism may be analysed again as a lack of forms that are marked for a recessive feature (here: *Special*). Gender syncretism (system-wide non-differentiation) is found in the oblique cases (cf. Table 1, *supra*). Among *Standard*-forms (*Msc./Ntr.*-forms) the distinction *Non-Special–Special* is not made in the *G.* and the *D.*, i.e., there are no extra *Standard-Special*-forms (*Ntr.*-forms) in the oblique cases. This is not the whole story, however.

## 11 The paradigm DIESER

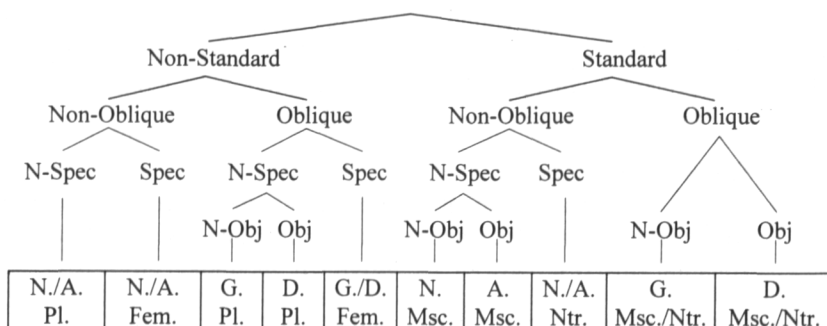
Gender syncretism (of *Msc.* and *Ntr.*) is restricted to the oblique cases. It cannot be analysed, therefore, as a case of neutralization without going beyond the gender system. The interplay of gender and case must be taken care of. Thus we need a treatment of ‘reciprocal dominance’. The problem

(cf. Section 6, *supra*) to be tackled is this: In the preceding, syncretism has been interpreted as neutralization, viz., as non-differentiation regarding a recessive feature. Case syncretisms, in particular, have been treated as non-differentiations regarding Objective, and, furthermore, as internal to the four subparadigms Msc., Ntr., Fem. and Pl. (since patterns of syncretism differ among these). Gender, then, dominates case. This would seem to require that case classifications are handled as subclassifications within the four gender classes. On the other hand, if Msc./Ntr.-syncretism in oblique cases is taken to be due to non-differentiation regarding Special, then it appears that case dominates gender. This being so, gender classifications should be treated as subclassifications within case categories. But then the fact of reciprocal dominance seems to preclude a treatment of neutralization in terms of non-applied subclassifications.

The problem is solved by an analysis of the paradigm DIESER that builds on four classifications (corresponding to the four features Oblique, Objective, Standard and Special), not two (one for gender, one for case). As should have become apparent, the major distinctions in the paradigm DIESER are Non-Standard–Standard (the dominant gender distinction) on the one hand and Non-Oblique–Oblique (the dominant case distinction) on the other. It is not gender that dominates case (or vice versa), rather both the dominant gender distinction and the dominant case distinction dominate both the recessive gender distinction and the recessive case distinction. Only when the relationship among dominant features is considered, do we find simply dominance of gender over case (and likewise with recessive features). Let us assume, then, the following hierarchy of features (in descending order):

Standard > Oblique > Special > Objective

The resulting overall classification system is again presented as a diagram (with names of recessive features abbreviated for reasons of space):



Missing subclassifications take care for syncretisms. The ten end-points of the classification system correspond to the ten syncretism fields in Table 1, that is, these fall out as 'natural classes'. Moreover, the diagram makes apparent a rather simple 'logic of syncretisms': (i) no form is marked for two recessive features, and (ii) there are no Standard-Oblique-forms that are marked for the recessive gender feature (Special), and no Non-Standard-Non-Oblique forms that are marked for the recessive case feature (Objective).

Given this system of classifications, the paradigm DIESER may be presented as in Table 3. As compared to Table 2 the classifications with respect to Standard and Special have been added, so that the four partial paradigms are moved together to form a coherent whole. As before, columns correspond to dominant classifications, while rows correspond to recessive ones.

|         |           |                      |                       | Standard              |                         |
|---------|-----------|----------------------|-----------------------|-----------------------|-------------------------|
|         |           | Oblique              |                       |                       | Oblique                 |
|         |           | <i>-e N./A. Pl.</i>  | <i>-er G. Pl.</i>     | <i>-er N. Msc.</i>    | <i>-es G. Msc./Ntr.</i> |
|         |           | —                    | <i>-en D. Pl.</i>     | <i>-en A. Msc.</i>    | <i>-em D. Msc./Ntr.</i> |
|         | Objective |                      |                       |                       |                         |
|         |           | <i>-e N./A. Fem.</i> | <i>-er G./D. Fem.</i> | <i>-es N./A. Ntr.</i> |                         |
| Special |           |                      |                       |                       |                         |
|         | Objective |                      |                       |                       |                         |

**Table 3**

Paradigm DIESER: distribution of suffixes

For simplicity only suffixes are listed; traditional categorizations are added. Dashes stand for forms that are lacking due to case syncretism. The crossed out area comprises positions which are not occupied due to gender syncretism. Shading marks the area of consonantal suffixes, darker shading the area of heavy consonantal suffixes. A general and obviously iconically based regularity of suffix distribution may be read off Table 3.

I. *Suffix distribution (main rule)*

Forms without a dominant feature have non-consonantal suffixes, forms with a dominant feature (Standard and/or Oblique) have consonantal suffixes.

The distribution of consonantal suffixes in particular is as follows:

## II. *Suffix distribution (rules for consonantal suffixes)*

- a. Forms with two dominant features (Standard and Oblique) or with two gender features (Standard and Special), and only these, have heavy consonantal suffixes.
- b. As far as objective forms are distinguished, these, and only these, have nasal suffixes.

As set up, the paradigm DIESER does not involve a classification for number. This is at variance with the familiar rule that in noun phrases (such as *diese Kinder*) the pronoun agrees with the substantive in number, case, and gender, so a comment may be appropriate (though syntactic matters proper are certainly outside the scope of this paper). By the present analysis of the paradigm DIESER, 'plural forms' are not marked as such at all (just as there are no forms of English verbs that are marked for plural). An agreement rule to take care for this must say that in plural noun phrases pronouns agree with the substantive in case only, whereas in singular noun phrases pronouns agree with the substantive in case and gender. From this it would follow that gender-marked forms (Standard- or Special-forms) will not be considered for being used in the Pl., and genderless forms not for the Sg. (It is true, agreement rules take care only for forms that co-occur with substantives, but, of course, pronominal forms may also occur on their own. While this proves that tradition's agreement rules have to be replaced eventually by more general treatments, it does not affect the analysis of the paradigm DIESER.)

## 12 Conclusion

The analysis of the paradigm DIESER presented in this paper has been intended to show that (i) the distribution of suffixes among pronominal forms is determined iconically throughout and hence (ii) that in this paradigm there are no 'arbitrary' identities in expression. I should like to conclude by illustrating these results as they apply to a single suffix. Consider *-er*, which at first sight would appear not to yield too easily to a homogeneous interpretation. No doubt, this suffix is the least weighty (that is, the least consonantal) among the consonantal suffixes. Its rôle in the paradigm matches this characteristic. Looked at from a functional point of view, *-er* is the most unspecific among the consonantal suffixes. It is this what constitutes the unity of the suffix and — given the interplay of exponents in the paradigm — provides for its apparently disparate range of application. We may characterize *-er* as the unspecific exponent for forms to be marked for a dominant feature (Standard- or Oblique-forms), which is, however, overridden when more specific suffixes take priority.

Consonantal suffixes are required in the Msc./Ntr. (= Standard), and in addition in oblique cases in general. (This is what the main rule says.) Being the most unspecific one among these, *-er* appears whenever none of the conditions is fulfilled that trigger heavy or nasal consonantal suffixes. Heavy suffixes are required in oblique cases of the Msc./Ntr., and in addition in the Ntr. in general (by IIa). Thus the potential domain of application for *-er* is restricted to the direct cases of the Msc. and the oblique cases of the Fem. and Pl. In objective cases (A./D.), nasal suffixes compete (cf. IIb). However, in the Fem. (as a marked gender) no distinction is drawn between Objective-forms and Non-Objective-forms. Thus it is only in the Msc. and the Pl. that *-er* has to give precedence to its nasal rival *-en*. In consequence, *-er* appears in the G. Pl., the G./D. Fem. and the N. Msc. There is no simple syntactic characterization for this set of paradigmatic positions, let alone a semantic one. Still a paradigmatic analysis uncovers the morphological unity of the suffix. The same goes for the other suffixes that have been examined above. I submit that this state of affairs is typical for inflectional systems of languages like Modern Standard German.

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